

# *Impacts* *2001*

Idaho National Engineering and Environmental Laboratory



*An analysis  
of the INEEL's impact  
on Idaho's economy*



**INEEL**

Home of Science  
and Engineering Solutions

# 2001

## INEEL IMPACTS



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*This report analyzes the intrastate economic and sociological impacts resulting from operation of the U.S. Department of Energy's Idaho National Engineering and Environmental Laboratory (INEEL) during the period October 1, 2000, through September 30, 2001 (Fiscal Year 2001). It is based on an average number of employees and does not include the full impact of work force restructuring activities undertaken in 2001.*

*Data collected from the INEEL (which refers to the management and operations contractor organization), its supervising agency (the U.S. Department of Energy) and other organizations (University of Chicago, Bechtel-Bettis and BNFL) physically doing business on the INEEL Site has been combined for this examination.*

*This document has been prepared by Boise State University under contract B00183027001 by Dr. Geoffrey Black, Dr. Don Holley and Mr. John Church.*



## Introduction

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**T**he Idaho National Engineering and Environmental Laboratory (INEEL) is one of nine multi-program national laboratories operated by the U.S. Department of Energy (DOE). As a leader in research and development in energy, environmental quality, national security, and science and technology, the INEEL fulfills the mission of a federal research and development center and performs a crucial role in the nation's energy and environmental agenda.

In the process of providing these essential services to the country, the INEEL has become an important part of the eastern Idaho community and of the state of Idaho. In terms of land and payroll, the INEEL is one of the largest of the nine national laboratories. The Lab occupies 890 square miles in eastern Idaho, has a total annual budget of nearly \$1 billion, and employed an average of over 8,000 highly trained researchers, professionals, administrators and support staff during fiscal year 2001. Because of its size and its location in rural eastern Idaho, the Lab's impact on the local and state economy exceeds the local impacts of other national laboratories.

The economic importance of the INEEL is generated by the direct dollars spent in the region and through the indirect effects of those dollars being re-spent in the local and state economies. In terms of direct dollars, the INEEL pays wages and salaries to its employees and subcontractor employees, purchases goods and services from local contractors and suppliers, pays income to its retirees, pays educational expenses for its employees, and provides economic development grants to public and private organizations. The income generated by these direct expenditures is spent again and again within the community and generates a total impact much greater than the initial dollars spent. Also important to the economic well-being of the region is the impetus the INEEL gives to new and existing firms to utilize the new technologies that are the subject of

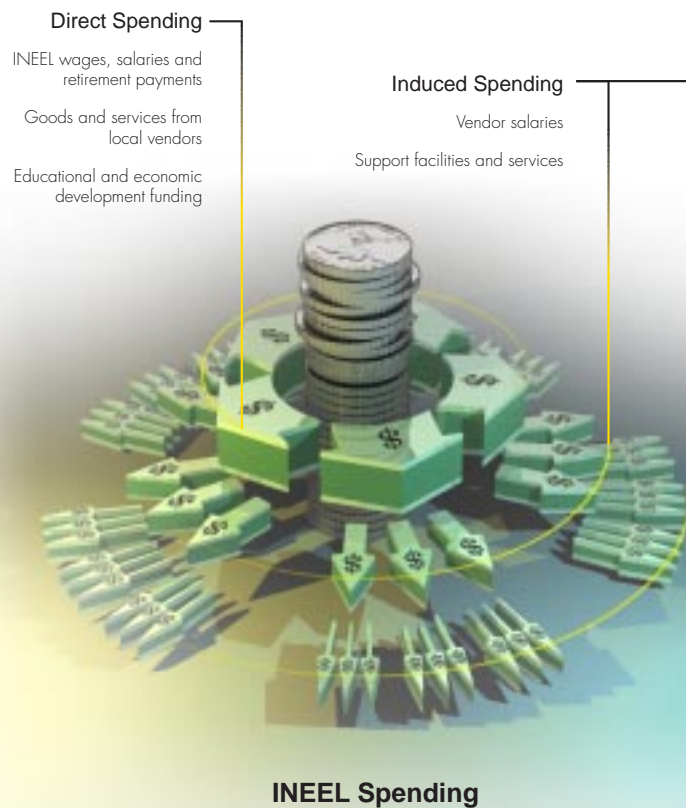
the research efforts in the Lab. By creating new business opportunities for Idaho companies, these "incubator" effects can make an important contribution to the future of the state.

This report assesses the economic, socio-demographic, and geographic impact of INEEL operations and expenditures. While each of these is detailed later in this report, a few highlights will underscore the role the INEEL plays in the Idaho economy.

In addition to being one of the largest national laboratories, the INEEL, with its substantial work force of scientists, researchers and related personnel, ranks among the top five employers in the state. Unlike the state's largest employer – state government – the INEEL work force is concentrated in one region and the INEEL's main contractor, Bechtel BWXT Idaho, LLC, is the largest employer in the area, with an impact felt statewide. Overall, in fiscal year 2001, the federal government and its major contractors at the INEEL paid nearly \$475 million in wages and salaries to employees and paid

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*INEEL dollars being spent and re-spent generate economic ripples across Idaho.*



Over 1,200 elementary and high school students visited the INEEL in 2001, along with over 200 educators.



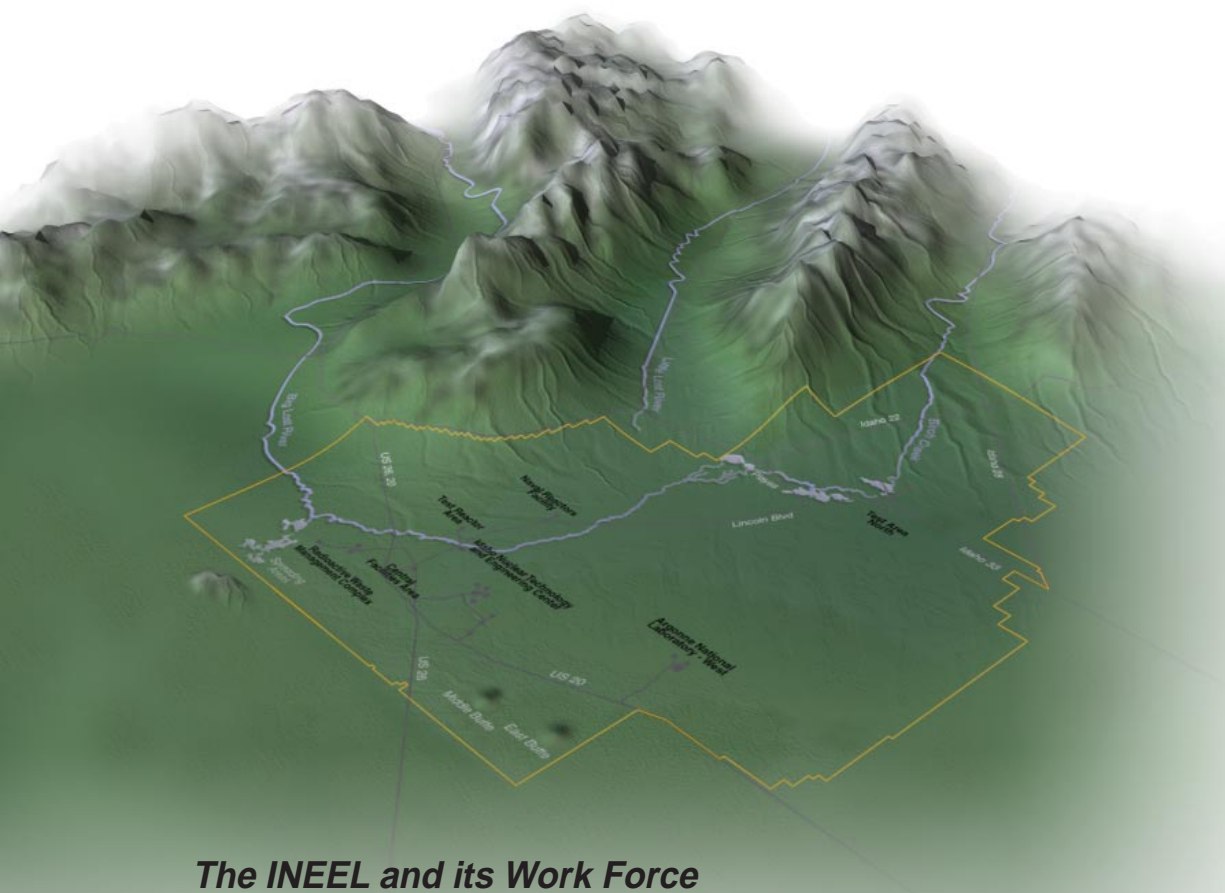
over \$20 million in retirement income to former employees living in Idaho. It also spent \$133 million on the purchase of goods and services and in payments to subcontractors in the state. In 2001, the INEEL made good on its pledge to assist the state in regional economic development by providing \$3.5 million in educational funding and development grants to public and private institutions. These direct payments provided further economic stimulus to the eastern Idaho economy.

In turn, this direct spending created even more jobs through the indirect effects of the dollars being spent and re-spent within the state. The economic impact analysis detailed later in this report indicates that the dollars spent at the INEEL are responsible for a total employment of approximately 18,345 people in Idaho. Further, it is estimated that INEEL employees and retirees accounted for approximately \$78 million in state and local taxes. The federal government also contributed an additional \$12 million in Impact Aid to local governments.

While creating jobs and generating economic growth are crucial, not every contribution can be boiled down to dollars and cents. Along with the economic benefits, the Lab and its employees are equally concerned with being good neighbors and contributing citizens. In this spirit, the INEEL is involved in a number of educational outreach efforts, providing training to mathematics and science teachers, making classroom presentations in many elementary schools, high schools and colleges throughout the state, and investing much-needed funds and resources in schools at all levels. In their capacity as employees, INEEL personnel made over 250 presentations to schools, colleges and social and service organizations throughout the state in 2001. Over 27,500 students and adults attended these presentations. Not only did the Lab go into the communities of the state, it also brought students and educators to the local community by hosting large educational events like Science Expo.

Equally important is the amount of time and energy that INEEL employees and their families contribute to worthy causes in their communities. INEEL employees spend over a million hours on volunteer activities in their communities.

*The INEEL is involved in a number of educational outreach efforts, providing training to mathematics and science teachers, making classroom presentations in many elementary schools, high schools and colleges throughout the state.*

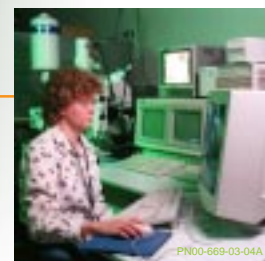


*Diverse operating facilities are dispersed across an 890-square-mile site in eastern Idaho.*

## The INEEL and its Work Force

The economic benefits of having one of the nation's premier national laboratories located in Idaho are significant. These benefits derive from the continuous flow of expenditures for the facility from the federal government, the accumulated effects of several decades of investment in the state, and the presence of world-class facilities and their associated work force. The ongoing federal expenditures associated with the INEEL provide a continuous infusion to the economies of the region and the state. In addition to these ongoing federal expenditures, the state benefits from the accumulated effects of over 50 years of investment in physical and human capital that has taken place at the Site. For example, the research and operating facilities at the INEEL amount to an investment of over \$4 billion. This growing stock of physical and human capital attracts businesses and entrepreneurs who need these kinds of assets. As a result, eastern Idaho has a comparative advantage in high-technology research.

The presence of one of the nation's premier national laboratories within the state also enhances the educational and business opportunities for Idaho citizens. The research facilities at the INEEL play host to students from several universities in the Rocky Mountain West, including Idaho State, University of Idaho, Boise State, and universities in Alaska, Montana, Utah and Washington, as well as several universities outside the West. The INEEL also plays a vital role in encouraging science education in secondary and primary schools in the state.



*The INEEL contributes a highly educated, stable, productive and high-income work force to the Idaho economy.*



*INEEL employees are assigned to research, operations and support facilities in Idaho Falls and at a remote site west of the city.*



The INEEL supports all four missions of the Department of Energy – environmental quality, science, energy, and national security.



In operation for over 50 years, the INEEL supports all four missions of the Department of Energy – environmental quality, science, energy, and national security. Although it is a federally funded research and development center, the management and operation of the INEEL is the responsibility of a limited liability corporation formed between Bechtel National, a division of Bechtel Group, one of the world's largest engineering and construction management firms, along with BWX Technologies, and the Inland Northwest Research Alliance, a consortium of eight universities in the Western United States. This unique team brings together educational, management, research and scientific assets for the benefit of the INEEL. The fruits of this association can be seen in the contributions made to energy and environmental research. For example, the Lab's leadership in environmental research and management led to the INEEL being named the DOE's lead laboratory for Environmental Management, with responsibility for guiding investments in science and technology for environmental stewardship activities at DOE facilities nationwide. The Lab, along with Argonne National Laboratory, also serves as DOE's designated lead for the Office of Nuclear Energy, Science and Technology.

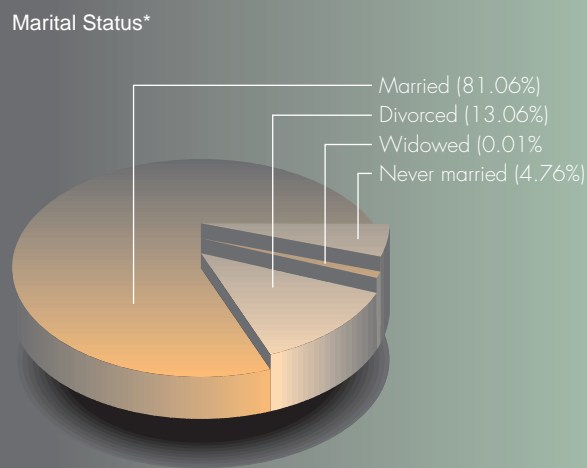
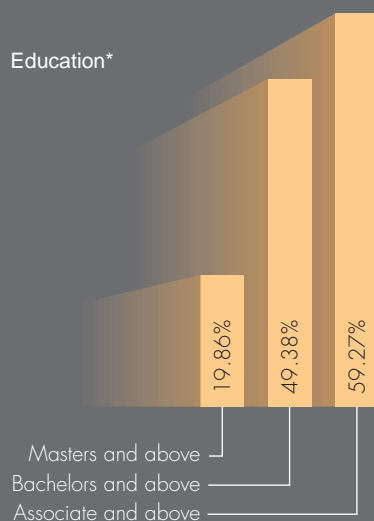
### Facilities Description

A unique aspect of the INEEL is the broad range of its activities – both geographically and operationally. There are nine separate major facilities spread across the 890-square-mile Site in southeastern Idaho. An important focus for many of the facilities at the INEEL is a broad range of research and development activities. These include national security, science and engineering, sophisticated materials testing and development, nuclear energy research, environmental quality and engineering, biotechnology, robotics, and other research and commercialization projects.

### Work Force Description

The INEEL contributes a highly educated, stable, productive and high-income work force to the Idaho economy. Half of INEEL employees have earned college degrees and 40 percent of the college degrees are at the graduate level. The stability of the INEEL work force is indicated by the fact that three quarters of them are married, compared to only half of households for the United States as a whole. About three-fourths of the work force is male. Average income for INEEL's employees is somewhat above the national average and are comparable to average salaries for workers in Idaho's high-technology sector.

Statistics show the INEEL work force to be stable and well-educated.

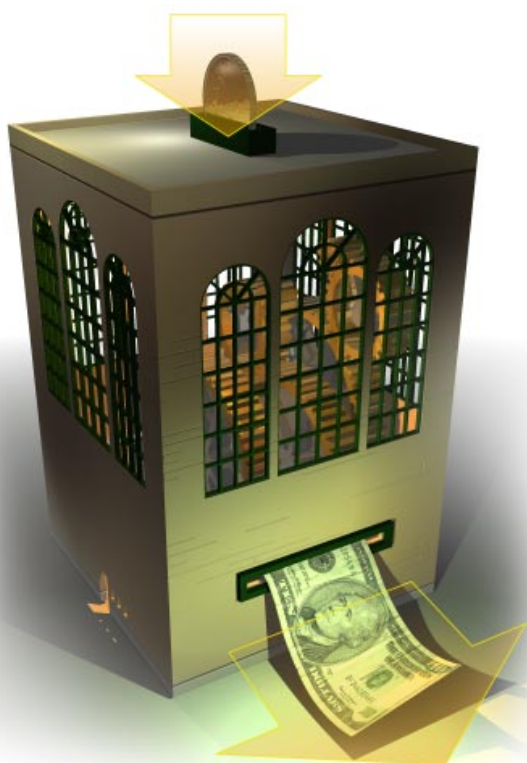


\*Based on survey response

## Input-Output Analysis

The INEEL's impact on the Idaho economy can hardly be overstated. It is among the largest employers in the state. Wages, salaries, and benefits received by INEEL employees living in the state exceed half a billion dollars each year and provide a major boost to Idaho's economic growth. The combination of wages, salaries,

*The construction and use of an Input-Output model allow investigators to answer questions such as the amount of employment and income generated in the Idaho economy by INEEL operations.*



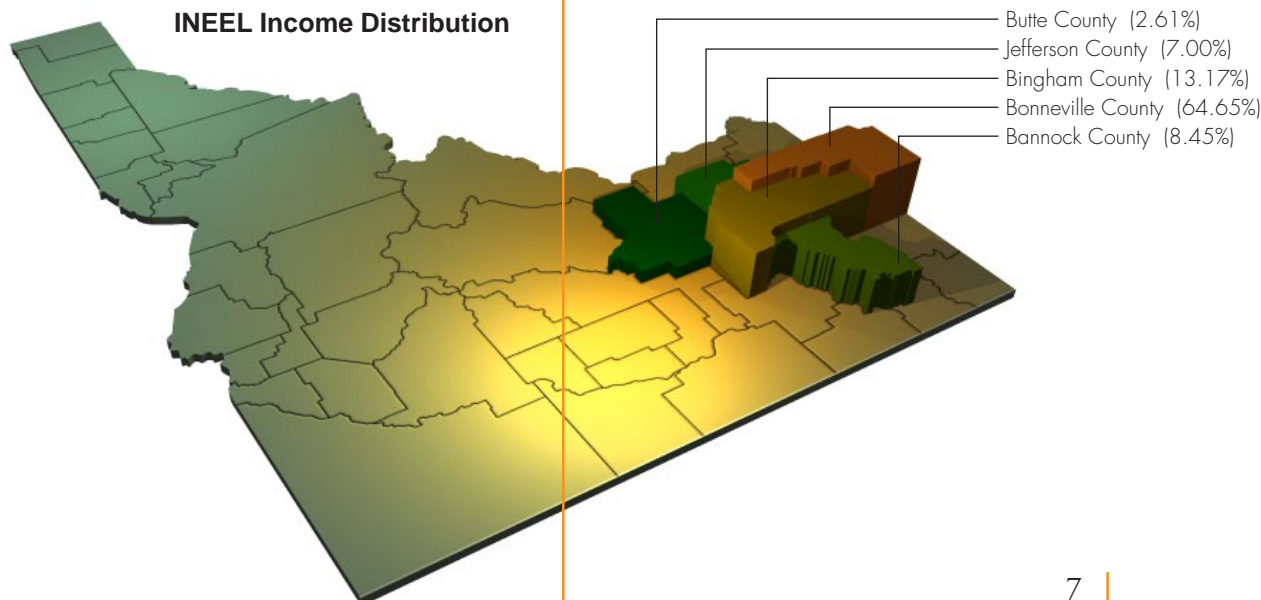
benefits, and purchases infuses over \$750 million directly into the Idaho economy each year. These expenditures, however, are only part of the story. Dollars expended by the INEEL leverage economic growth as employee expenditures create a ripple effect. Money is spent and re-spent in the Idaho economy. The boost in economic activity resulting from these indirect spending effects creates jobs and opportunities for thousands of Idaho residents, many of whom are unaware of their connection with the facility.

In order to assess the economic impact of the INEEL on the Idaho economy, a standard economic tool, called Input-Output Analysis, was employed. This type of analysis captures the interconnectedness of the economy by taking into account that different types of industries buy inputs from each other and sell their products to each other. This means that increases in the output and employment in one industry will cause increases in output and employment in all the industries from which the first industry purchases its inputs. The construction and use of an Input-Output model allow investigators to answer questions such as the amount of employment and income generated in the Idaho economy by INEEL operations.

In assessing the economic impact of the INEEL, the Input-Output analysis looks first at the direct effects of having the INEEL's employees as part of the Idaho economy and the expenditures of the Site on wages, salaries, benefits, and procurement of goods and services. As noted previously, the INEEL employed an average of over 8,000 workers during Fiscal Year 2001 and spends nearly \$475 million in salaries and wages annually. Virtually all of this goes to Idaho residents. For example, the largest proportion of INEEL employment and spending occurs in five counties of eastern Idaho; Bonneville, Bannock, Bingham, Butte and Jefferson. These counties accounted for \$450 million of the nearly \$475 million. The distribution of these funds can be seen in the illustration below.

*Wages, salaries, and benefits received by INEEL employees living in the state exceed half a billion dollars each year and provide a major boost to Idaho's economic growth.*

**INEEL Income Distribution**



In addition to the payment of wages and salaries, the employees at the INEEL require inputs that are purchased from local firms. These include office equipment, computers, software, food for vending machines and lunch rooms, custodial services, transportation, services of all kinds of professional consultants, air transportation, motels, restaurants and others. The INEEL purchases \$133 million worth of goods and services from suppliers and vendors in the state. Like expenditures on wages and salaries, this generates an important, measurable impact on the state's economy.

The expenditures on wages, salaries, and the procurement of goods and services by the Site constitute only part of the direct effects of the facility. Benefits paid by the facility also contribute

an important boost to the state's economy. Medical, dental, and vision benefits support employment in the health services sector in the state. Workers compensation payments support household spending across many sectors. A total of \$147 million was spent on health services and workers compensation during FY 2001, with most going to state residents. As a result, these benefits payments generate substantial employment in the state.

Another important boost to the state's economy comes from retirement payments to former INEEL employees and their survivors. The majority of retirees choose to remain in the state after leaving the Lab and, as a result, most retirement payments go to Idaho residents. In FY 2001, retirement benefits were paid to more than 2,300 Idaho residents. These payments amounted to more than \$20 million, over 85 percent of the total retirement benefits paid. As with health benefits and workers compensation payments, these payments are used to buy food, visit doctors, purchase houses, and consume a host of other goods and services in the local economy. All told, benefit payments for health services, workers compensation, and retirement amount to approximately \$170 million annually.

Direct impacts of the INEEL on Idaho's economy stems from the factors just described – the effects of expenditures on wages and salaries, procurement of goods and services from Idaho businesses, and the spending caused by payments of health benefits, workers compensation, and retirement benefits. The Input-Output analysis also accounts for the indirect effects resulting from having the INEEL located in the state. In essence, these indirect effects occur because direct expenditures by the Lab and its employees get re-spent again and again in the Idaho economy. For example, the employees of the firms that provide goods and services to the Lab also proceed to spend their income on food, clothing, entertainment, and taxes. Output and employment of local businesses increase again. The INEEL then becomes the foundation for an enlarged economy

*The INEEL requires a variety of inputs purchased from local firms, including office equipment, computers, software, food, custodial services, transportation, air transportation, motels, etc.*



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*A total of \$147 million was spent on health services and workers compensation during FY 2001, with most going to state residents.*



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## Economic Sector Impacts

Sector	Total Employment	Employment Increase Due to INEEL	
Agriculture	16623	121	Includes landscaping, horticultural services, greenhouses, nurseries, poultry and eggs, etc.
Mining	380	1	Includes sand, gravel, clay, dimension stone
Construction	22944	565	Includes residential and non-residential
Manufacturing	42166	204	Includes lumber and wood products, food and kindred products, chemicals and allied products
Transportation, and public utilities	14107	430	Includes electricity, natural gas, telephone, bus train, plane, warehousing, water, sanitary services, radio, tv, travel agents
Trade	66441	2146	Includes wholesale and retail, building materials, general merchandise, grocery stores, apparel, eating and drinking, furniture
Finance, insurance, and real estate	22707	676	Includes banking, insurance, brokers, credit agencies
Services	84449	12945	Includes medical legal, beauty, and barber shops, funeral, hotels, building maintenance, personnel services, all business services
Federal government	13135	355	Includes military and non-military
State and local government	31444	903	Includes state and local education and non-education
Total		18345	

causing more grocery stores, clothing stores, and schools to be built and staffed. The local community experiences an increase in all kinds of employment including engineering consultants, school teachers, police officers, grocery store clerks, auto mechanics and so on.

The Input-Output Analysis accounts for the direct and indirect effects of the INEEL on the economic community of Idaho. There are four distinct regions of Idaho: southeast Idaho (Idaho Falls), south central Idaho (Twin Falls), southwest Idaho (Boise), and northern Idaho (Lewiston, Coeur d'Alene). A different economic model was developed for each region. The impacts on the state as a whole were then assessed by combining results from the four regional models.

The analysis indicates that the activity at the INEEL and its substantial work force support an additional 10,250 jobs statewide. It is estimated, then, that a total of 18,345 Idaho jobs can be attributed to the facility. The additional jobs created by the Lab translate into an employment multiplier of 2.3. In other words, each job at the INEEL sustains 2.3 jobs – itself, and 1.3 more. Included in these numbers are:

- 9,239 jobs required to support current INEEL employees and their families
- 448 jobs sustained by those who have retired from the INEEL and who live in the state
- 28 jobs sustained by a labor force that is more generous in its charitable contributions than the average community

- 575 jobs sustained in education because of Impact Aid received from the federal government by the local school districts
- 104 jobs sustained in higher education, both public and private
- 45 jobs sustained from economic assistance grants to local governments

The table above gives the increased employment due to the INEEL in different sectors of the economy. As we can see, although the facility is staffed to a large degree by engineering and scientific professionals and related personnel, the economic effects ripple through every sector of the economy. For example, the analysis estimates that while the major impact occurs in the services sector, the facility also supports thousands of jobs in other sectors of the state's economy, including the trade, construction, manufacturing, transportation, agriculture, finance, insurance and real estate sectors. In turn, the increase in private-sector employment and increased economic activity leads to an increased demand for public-sector services.

In summary, the Input-Output Analysis demonstrates the INEEL's impact on the Idaho economy. The wages, salaries, and benefits received by INEEL employees and retirees living in the state are close to half a billion dollars each year. Given the multiplier of 2.3, the combination of wages, salaries, and benefits paid to INEEL employees causes an additional increase in income of more than approximately \$500 million. Thus, total income in the region increases by more than \$1 billion.

*Although the INEEL is staffed to a large degree by engineering and scientific professionals and related personnel, the economic effects ripple through every sector of the economy.*



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*The presence of a major airport in Idaho Falls can largely be attributed to the population growth and economic activity generated by the INEEL.*

### Longer Term Economic Effects

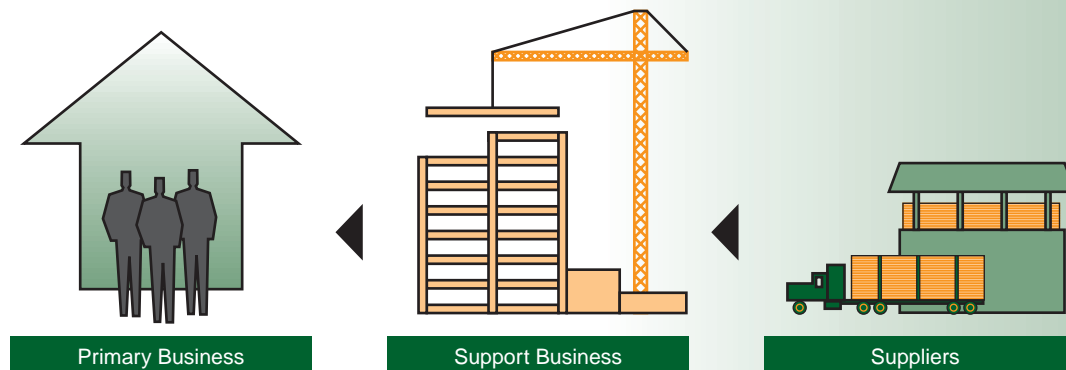
The direct and indirect impacts of the INEEL on Idaho's economy estimated by the Input-Output analysis can be thought of as the short-term impacts. The approach discussed up to this point focuses on the short-term employment and economic multipliers. It is important to keep in mind, however, that the impact of the presence of the INEEL in eastern Idaho has been felt for decades. For more than a half-century, the Lab has contributed to the economic growth of the region and the state. Because of the presence of the facilities at the Site, the amount of purchases and spending generated by the Lab, and other factors, the INEEL has, over the fifty years of its existence, dramatically altered the economic landscape of the region. For example, the presence of a major airport in Idaho Falls can largely be attributed to the population growth and economic activity generated by the INEEL. In turn, the arrival of the airport attracts distributors, shippers, and other types of economic activity that may well have located

elsewhere – perhaps within the state or outside of Idaho. The additional population, especially in Bonneville County, was enough to make Idaho Falls a retail center. Without the INEEL there would have been an entirely different pattern of retail trade in eastern Idaho. The early phase of development of the INEEL and the economic growth generated by its construction and continued presence acted as a magnet to other types of economic activity.

These “agglomeration economies” are a vital part of the long-term growth of any economy. They are, in essence, the growth that occurs when industries are attracted to an area because of some degree of “critical mass.” For example, the growth in population attracts construction firms. The presence of these firms makes the area attractive to suppliers of construction materials and other materials. Economists have long recognized that these effects can be substantial. To begin to appreciate these longer-term impacts, we need to imagine what eastern Idaho would have been like without the Site.

Economic analysis performed for this report estimates what the economic landscape of eastern Idaho would have looked like without the INEEL's economic contribution over the past five decades. To that end, historic populations for the eastern Idaho region were gathered for the U.S. Census years of 1940, 1950, 1960, 1970, 1980, 1990, and 2000. Historic birth and death rates were assembled for the area as well as for a surrogate area in Idaho that did not experience the economic impacts of the INEEL. Population, employment, income, and other socioeconomic patterns were constructed using this baseline community. By doing so, a picture emerges of eastern Idaho without the INEEL. It is estimated that total non-agricultural employment in eastern Idaho would be approximately 23,400 less than current levels. Approximately 18,000 of these jobs can be accounted for by the direct and indirect impacts estimated by the short-term Input-Output Analysis. The remaining 5,400 jobs can be attributed to agglomeration economies stemming from the long-term presence of the INEEL (See Appendix).

*In an agglomeration economy, the presence of one business acts as a magnet to other businesses. This, in turn, attracts still others.*



## Economic Diversity and Development

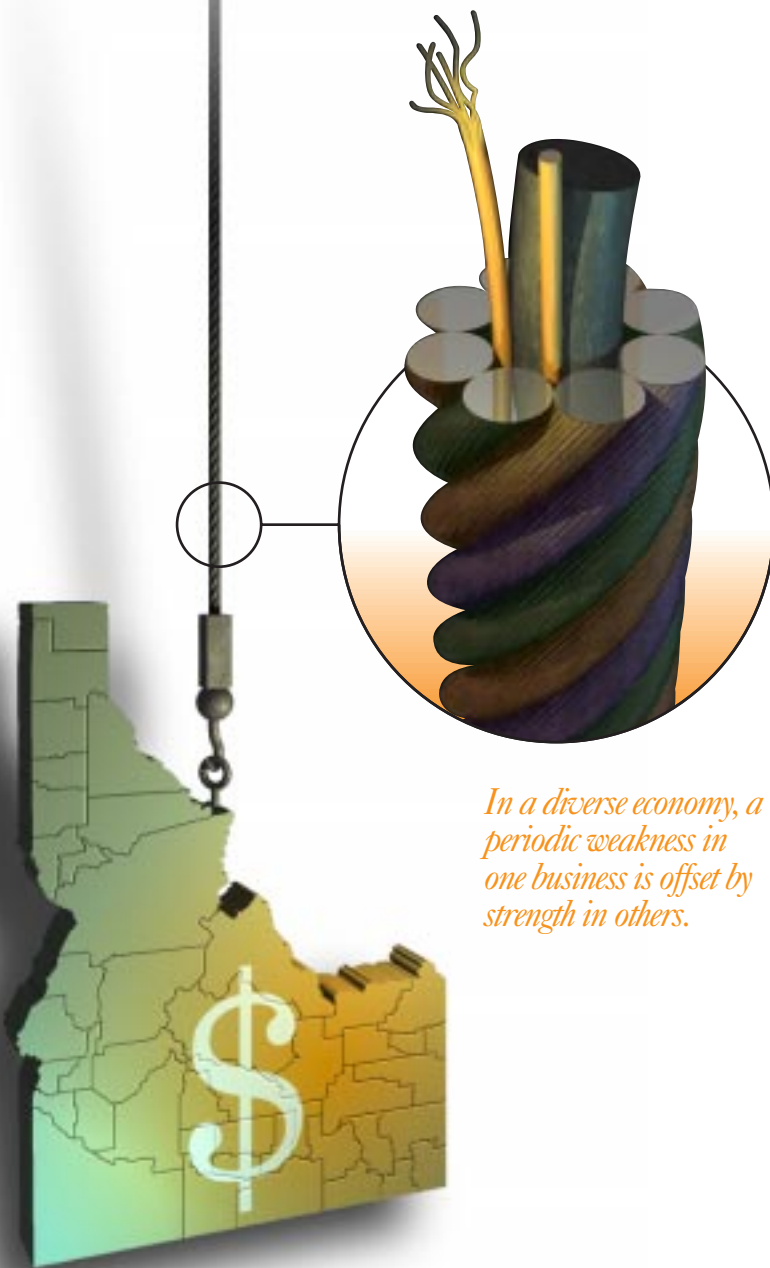
A major contribution the INEEL has made to the economy of the state of Idaho is diversity. To make this point, consider again what the Idaho economy would look like without the INEEL. The eastern part of the state would have been dominated by agricultural production, services associated with railroad transportation, and phosphate manufacturing and distribution. With a less diverse economy, the state would have been subjected to a much greater degree of economic volatility. Each industry is subject to its own pattern of recession and recovery. When a community is dominated by one industry, it will experience that same pattern of fluctuation. The worst possible scenario for a regional economy is when all of its industries experience recession at the same time. Industrial diversity moderates this pattern because, with a greater number and diversity of industries, not all industries experience the same cycle. Weakness in one industry is offset by strength in another.

The INEEL is an industry that is relatively more stable and not correlated with the fluctuations that affect many of Idaho's major industries. For example, weakness in the agricultural markets will weaken the phosphate market but have no impact on the activities at the INEEL. Similarly, technological changes in the production of railroad services have reduced the scale of those operations in eastern Idaho but have had no impact on INEEL operations. On the other hand, occasional budget reductions on the part of the federal government may lead to fluctuations in the staff and procurements at the INEEL, but those fluctuations are not correlated with events in the potato, wheat, barley, phosphate or railroad industries.

The contribution of the INEEL to increased economic diversity can be seen by considering these numbers for Bonneville County:

- The service industry, which includes the firms at the INEEL, accounts for 41 percent of non-agricultural employment. Without the INEEL it would have accounted for just 25 percent.
- Manufacturing, which is dominated by food processing, accounts for 5 percent of non-agricultural employment. Without the INEEL it would have accounted for 12 percent.
- State and local government employment accounts for 11 percent of non-agricultural employment. Without the INEEL it would have accounted for 17 percent.

With the increased economic diversity provided by having the INEEL in the state, Idaho's economy is less buffered by the winds of economic change. Among other things, this provides a more stable tax base for state and local governments. This is especially important during times when the more



*In a diverse economy, a periodic weakness in one business is offset by strength in others.*

volatile sectors of the state's economy experience a downturn. With a more diversified economy, personal income in the state is more stable than it would be without the INEEL. This, in turn, leads to less volatility in state tax revenues and less need to cut back on government services during times when they are needed most.

The INEEL fosters the continued development and diversity of Idaho's economy in other ways. One of the most important is its ongoing program of offering economic development assistance and

*In total, nearly \$1.4 million dollars of corporate funding was contributed by the INEEL to state and local governments, agencies and firms across Idaho in 2001.*

funding across the entire state. The illustration below shows the range of economic development efforts by the INEEL, through disbursement of corporate dollars, in every part of the state.

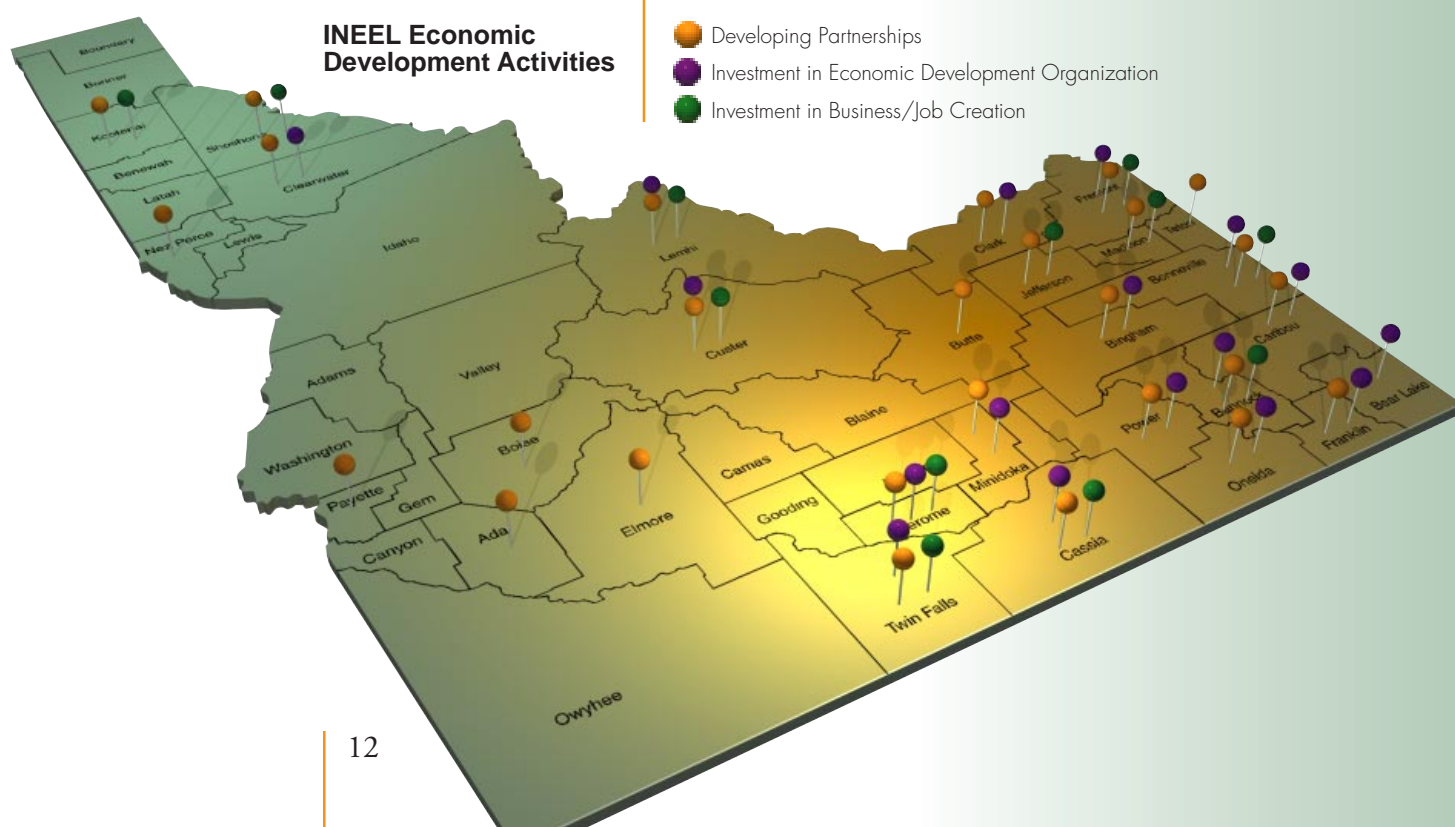
In total, nearly \$1.4 million dollars of corporate funding was contributed by the INEEL to state and local governments, agencies and firms across Idaho in 2001. All parts of the state benefited from this funding, with economic development grants totaling \$440,000 in northern Idaho, \$241,000 in southern Idaho, and \$618,700 in eastern Idaho. To give an idea of the types and diversity of these grants, consider these highlights:

- The INEEL coordinated with the Coeur d'Alene economic development agency and the Idaho Department of Commerce and Labor to provide grants to businesses in Coeur d'Alene. Funds provided by INEEL equaled \$250,000.
- The INEEL teamed with the Idaho Department of Labor, local city and county officials, and the Jerome Chamber of Commerce to utilize block grants to locate businesses downtown to further revitalization. Total funding for this and other grants in Jerome equals \$181,000.
- The facility provided \$50,000 and worked with the Governor's Rural Economic Development initiative team to enable the expansion of Salmon's economic development agency into northern Custer County.

The contributions of the INEEL and its main contractor to economic development in the state are not limited to just providing funding. Two of the key assets of the facility are its highly skilled work force and the sophisticated technologies researched at the Site. The INEEL actively uses the expertise of its work force to expand economic opportunities

throughout the state. For example, the INEEL established a partnership with Boise State University and Idaho State University business schools to assist the Big Lost River Valley and the Technology Corridor projects with market assessments and feasibility studies. The facility's Technology Transfer team offers a technical assistance program to provide businesses and agencies easy access to INEEL personnel for almost any type of technical problem a community or business may need solved. Seventeen entities were assisted through this program during FY 2001. The INEEL also played key roles in statewide economic development associations, including Idaho's Rural Partnership (IRP), the Idaho Economic Development Association (IEDA), the Eastern Idaho Economic Development Council, the Governor's Council on Entrepreneurship and others.

Although the size and quality of the work force and state-of-the-art facilities at the INEEL would be a welcome contribution to any state's economy, they are particularly important to a rural state with a small population. Nationally, Idaho ranks seventh in terms of research and development (R&D) expenditures as a fraction of the state's output of goods and services. Total R&D expenditures include spending by colleges, universities and industry. When only industry expenditures are considered, which for Idaho would reflect the INEEL, Idaho ranks second in the nation and second in the region, behind the state of Washington. Industry spending in Idaho is primarily INEEL, and in Washington it is primarily Boeing. Comparing total expenditures on research and development in Idaho to all other states, Idaho does not stand out. However, when adjusted for the size of the state by measuring R&D expenditures as a percent of Gross State Product (GSP), Idaho is strikingly different.





Courtesy Coeur d'Alene Chamber of Commerce/Quicksilver Studios

The INEEL coordinated with regional economic developers and the Idaho departments of Commerce and Labor to boost Coeur d'Alene's business community.

## Socio-Demographic Effects

Although the economic effects of the INEEL documented above are crucial to the area's economic health, the INEEL contributes more to the economy and quality of life of the surrounding community and the state as a whole than can be estimated by the Input-Output analysis. Some of these contributions can be measured in dollars and cents while others are more qualitative in nature. For example, employees at the facility and the vendors that supply goods and services pay sales and income taxes to local and state governments and this flow of dollars can be measured. However, outreach programs conducted by the INEEL and the volunteer activities by its employees are difficult to quantify, but nonetheless add substantially to the quality of life of the region and the state.

In the spirit of being a good neighbor, the INEEL is involved in several educational and other types of outreach programs and its employees make substantial contributions through volunteer activities and charitable giving.

In terms of outreach programs, INEEL personnel shared their expertise with students of all ages throughout the state. For example, the Lab's employees provided training to science and mathematics teachers as well as making science and other presentations to primary, secondary, and

college students statewide. Over 250 such presentations were made throughout Idaho with audiences of more than 27,500 during FY 2001. In addition to INEEL employees going out into Idaho's communities, the INEEL also brings people from across the state to the facility. Here are some of the highlights of these outreach activities:

- Over 1,200 elementary and high school students visited the facility along with over 200 educators.
- The Lab hosted more than 120 students from universities across Idaho and the nation to assist with research at the Lab.
- The Lab conducts events such as "Science Expo" that bring students and teachers from across the state to share science projects and learn about recent advances in research and development.
- Nearly 400 representatives from business and civic groups visited the facility to share ideas about ongoing research.

Such events, in addition to providing unique and valuable learning opportunities for students and educators, also bring people into the local community. By shopping in stores, staying at local hotels, and dining at local restaurants, people attracted to the area by such programs bring welcome revenues to businesses in the area.

*Outreach programs conducted by the INEEL and the volunteer activities by its employees are difficult to quantify, but nonetheless add substantially to the quality of life of the region and the state.*

It is important to note the extent to which the INEEL is integrated into many Idaho communities. Rather than being a separate entity, the facility is a vital part of the fabric of community life for much of eastern Idaho. The tables below quantify the significant impact of INEEL households on select cities, counties and school districts in the region. These figures include only the households of

employees of the INEEL. When we consider that the results of the Input-Output analysis shows that each job at the INEEL is responsible for maintaining an additional 1.3 jobs in related industries, we can appreciate the extent to which regional and statewide population and community life depends on the Lab.

### INEEL Population Impacts

INEEL Household Population – by city (Imputed, as a percentage of total city population – 2000 Census)	
Ammon	17.9%
Arco	38.6%
Blackfoot	15.5%
Firth	49.8%
Idaho Falls	21.5%
Mackay	30.1%
Moore	38.3%
Mud Lake	10.9%
Rigby	34.2%
Ririe	22.2%
Shelley	19.1%
Ucon	15.2%

NOTE: Lists only those cities with INEEL populations greater than 10 percent of total city population.

INEEL Household Population – by county (Imputed, as a percentage of total county population – 2000 Census)	
Bannock	2.3%
Bingham	7.5%
Bonneville	16.6%
Butte	19.7%
Custer	4.8%
Jefferson	8.9%
Madison	2.1%

NOTE: Lists only those counties within the seven-county primary study area.

INEEL Household Population – by school district (Imputed, as a percentage of total school district enrollment)	
Bonneville Joint District 93	17.5%
Butte Joint District 111	27.6%
Firth District 59	16.6%
Idaho Falls District 91	23.5%
Jefferson Joint District 251	13.2%
Mackay Joint District 182	12.6%
Ririe Joint District 252	16.3%
Shelley Joint District 60	12.2%

NOTE: Lists only those school districts with INEEL-attributable enrollments greater than 10 percent of total district enrollments.

# 2001

INEEL IMPACTS

## Appendix

## Bonneville County Historic Economic & Demographic Profile:

Employment:	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Manufacturing	2,179	2,184	2,333	2,149	2,385	2,206	2,151	2,128	2,148	2,178	1,677	1,361	1,292	1,493	1,772	1,903
Mining	59	34	38	43	39	40	44	90	109	53	47	73	107	85	59	65
Construction	1,412	1,323	1,310	1,491	1,632	1,690	2,134	2,246	2,592	2,233	2,070	1,808	1,545	1,359	1,674	1,897
Transp., Comm., & Util.	870	875	953	1,053	1,083	885	1,029	1,159	1,241	1,269	1,153	1,180	1,028	1,013	917	975
Wholesale & Retail Trade	4,959	5,437	5,932	6,328	6,286	6,587	7,116	7,429	7,574	7,375	6,968	7,080	6,915	7,160	7,776	8,230
Wholesale Trade						1,889	2,079	2,300	2,361	2,388	2,282	2,413	2,404	2,359	2,390	2,349
Retail Trade						4,544	5,037	5,129	5,213	4,987	4,526	4,667	4,384	4,689	5,386	5,792
Fin., Ins., & Real Est.	673	704	741	784	908	1,006	1,223	907	938	935	814	1,518	1,590	1,634	1,651	1,668
Services*	6,075	6,547	6,746	6,857	6,373	6,997	7,903	9,091	9,795	10,107	10,987	11,232	11,030	10,877	10,455	11,085
Government	2,591	2,600	2,839	2,901	2,982	3,100	3,219	3,320	3,529	3,567	3,591	3,581	3,555	3,544	3,537	3,637
- Federal	658	646	633	629	630	652	667	658	650	771	770	763	752	743	715	709
- State & Local	1,933	1,954	2,206	2,272	2,352	2,448	2,552	2,662	2,862	2,779	2,805	2,789	2,762	2,766	2,792	2,905
<b>Total Nonagricultural Employment</b>	18,817	19,704	20,893	21,607	21,687	22,512	24,820	26,370	27,927	27,718	27,307	27,833	27,063	27,164	27,841	29,462
<b>Population</b>	52,567	52,701	54,604	55,025	57,591	58,965	60,330	62,494	64,805	65,620	66,219	67,096	66,865	67,260	68,066	68,630
<b>Households</b>	14,797	15,267	15,989	16,293	17,267	17,905	18,530	19,430	20,414	20,928	21,307	21,733	21,557	21,668	22,109	22,487
Persons per Household	3.49	3.44	3.40	3.36	3.32	3.28	3.24	3.20	3.16	3.12	3.08	3.07	3.05	3.04	3.02	3.01
<b>Total Personal Income:</b>																
Current \$	195,340	211,623	237,783	274,228	317,057	348,801	398,347	446,242	502,441	548,142	609,664	669,497	692,711	739,945	819,774	897,606
1992 dollars	706,394	733,777	798,360	867,153	902,785	909,972	982,772	1,033,725	1,081,391	1,060,408	1,038,691	1,033,790	1,007,841	1,043,055	1,107,938	1,171,589
<b>Per Capita Personal Income:</b>																
Current (\$)	3,716	4,016	4,355	4,984	5,505	5,915	6,603	7,141	7,753	8,353	9,207	9,978	10,360	11,001	12,044	13,079
1992 dollars	13,438	13,923	14,621	15,759	15,676	15,432	16,290	16,541	16,687	16,160	15,686	15,408	15,073	15,508	16,277	17,071

\* Note: Service industry employment includes Butte county service industry employment attributable to INEEL.

## Bonneville County without INEEL: An Economic & Demographic Simulation

Employment:	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Manufacturing	1,563	1,633	1,596	1,816	1,907	1,758	1,844	1,975	2,432	2,643	2,336	2,156	2,092	2,069	2,180	2,106
Mining	11	20	11	3	15	15	20	13	13	10	16	22	24	28	25	21
Construction	534	657	623	714	747	773	866	902	919	976	896	908	753	563	597	607
Transp., Comm., & Util.	887	886	918	969	967	892	951	962	1,018	984	984	977	897	917	922	945
Wholesale & Retail Trade	2,802	2,922	3,172	3,384	3,739	3,745	3,819	3,857	4,030	4,197	4,144	4,226	4,144	3,966	3,954	4,026
Wholesale Trade						1,231	1,217	1,121	1,223	1,375	1,309	1,367	1,363	1,236	1,107	1,050
Retail Trade						2,513	2,601	2,736	2,807	2,822	2,835	2,859	2,781	2,730	2,847	2,976
Fin., Ins., & Real Est.	514	510	564	595	625	654	536	503	541	593	610	947	937	1,045	1,008	973
Services	1,350	1,254	1,153	1,297	1,453	1,481	1,665	1,713	1,893	1,948	1,948	2,164	2,083	2,052	2,206	2,313
Government	1,472	1,797	1,799	1,857	2,126	2,093	2,091	2,220	2,127	2,206	2,235	2,188	2,157	2,176	2,194	2,241
- Federal	230	228	229	235	244	228	248	249	256	258	272	264	258	255	257	263
- State & Local	1,242	1,569	1,570	1,622	1,882	1,865	1,844	1,970	1,870	1,948	1,964	1,924	1,899	1,921	1,937	1,978
<b>Total Nonagricultural Employment</b>	9,132	9,678	9,834	10,635	11,579	11,411	11,792	12,143	12,971	13,558	13,169	13,587	13,087	12,817	13,086	13,231
<b>Population</b>	29,512	30,727	31,704	32,293	32,947	33,963	34,271	35,159	35,313	35,919	37,361	37,699	37,991	38,533	38,547	38,151
<b>Households</b>	9,673	10,139	10,568	10,875	11,172	11,638	11,826	12,262	12,404	12,754	13,363	13,533	13,688	13,883	13,940	13,847
Persons per Household	2.99	2.97	2.94	2.91	2.89	2.86	2.84	2.81	2.79	2.76	2.74	2.73	2.72	2.72	2.71	2.70
<b>Total Personal Income:</b>																
Current \$	109,457	118,640	134,960	159,914	194,466	195,241	211,567	220,059	253,787	283,300	333,474	355,904	374,986	398,127	426,871	435,853
1992 dollars	395,822	411,370	453,130	505,672	553,720	509,355	521,962	509,769	546,219	548,059	568,144	549,562	545,576	561,215	576,924	568,891
<b>Per Capita Personal Income:</b>																
Current (\$)	3,709	3,861	4,257	4,952	5,902	5,749	6,173	6,259	7,187	7,887	8,926	9,441	9,870	10,332	11,074	11,424
1992 dollars	13,412	13,388	14,292	15,659	16,806	14,998	15,230	14,499	15,468	15,258	15,207	14,578	14,361	14,564	14,967	14,912

## Bonneville County Historic Economic & Demographic Profile:

Employment:	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Manufacturing	1,657	1,633	1,659	1,655	1,787	1,985	2,029	2,119	2,179	1,662	1,745	1,885	2,024	2,178	2,266
Mining	51	21	31	30	2	2	2	2	2	2	2	2	10	7	7
Construction	2,144	1,934	1,745	2,105	2,535	2,430	2,264	2,407	2,512	2,472	2,439	2,558	2,652	2,803	2,625
Transp., Comm., & Util.	932	894	926	885	909	935	971	1,027	1,106	1,246	1,421	1,530	1,548	1,675	1,670
Wholesale & Retail Trade	8,147	8,426	8,855	9,126	9,332	9,931	10,251	10,486	10,809	11,223	11,430	12,098	12,225	12,659	12,825
Wholesale Trade	2,246	2,377	2,482	2,538	2,462	2,890	2,901	3,041	3,188	3,330	3,669	3,908	3,923	4,012	4,076
Retail Trade	5,808	6,049	6,312	6,539	6,808	7,041	7,274	7,385	7,689	7,893	7,761	8,190	8,302	8,647	8,750
Fin., Ins., & Real Est.	1,280	1,290	1,410	1,351	1,425	1,402	1,379	1,398	1,447	1,426	1,432	1,494	1,425	1,474	1,460
Services*	11,093	11,240	11,426	12,410	13,262	14,026	14,304	14,920	15,081	16,300	16,805	17,240	17,348	17,792	18,210
Government	3,691	3,805	3,985	3,986	4,199	4,622	4,721	4,854	4,961	5,190	5,365	5,236	5,345	5,554	5,534
- Federal	713	702	701	720	763	811	918	890	871	830	764	732	727	738	738
- State & Local	2,959	3,056	3,207	3,266	3,436	3,811	3,803	3,964	4,090	4,360	4,601	4,504	4,618	4,816	4,796
<b>Total Nonagricultural Employment</b>	28,995	29,241	30,039	31,548	33,452	35,333	35,921	37,213	38,097	39,521	40,639	42,043	42,578	44,142	44,596
<b>Population</b>	69,346	70,434	70,809	71,295	72,603	75,011	77,104	78,251	79,118	79,429	79,362	80,021	80,699	81,536	81,820
<b>Households</b>	22,854	23,381	23,728	24,033	24,286	25,240	26,076	26,976	27,314	27,532	27,610	27,997	28,630	29,265	28,115
Persons per Household	3.00	2.98	2.97	2.95	2.94	2.91	2.89	2.86	2.83	2.86	2.85	2.83	2.79	2.76	2.89
<b>Total Personal Income:</b>															
Current \$	933,094	984,134	1,048,564	1,145,503	1,251,370	1,321,250	1,413,628	1,480,081	1,531,645	1,563,819	1,603,642	1,653,627	1,731,448	1,919,049	2,035,970
1992 dollars ('92\$ x 1,000)	1,195,223	1,216,039	1,244,888	1,297,354	1,344,670	1,360,994	1,414,048	1,437,091	1,450,054	1,439,739	1,434,085	1,445,636	1,490,468	1,616,283	1,660,954
<b>Per Capita Personal Income:</b>															
Current (\$)	13,456	13,972	14,808	16,067	17,236	17,614	18,334	18,915	19,359	19,688	20,207	20,665	21,456	23,536	24,884
1992 dollars ('92\$)	17,236	17,265	17,581	18,197	18,521	18,144	18,339	18,365	18,328	18,126	18,070	18,066	18,469	19,823	20,300

\* Note: Service in

## Bonneville County without INEEL: An Economic & Demographic Simulation

Employment:	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Manufacturing	1,981	2,014	2,214	2,490	2,797	2,921	2,678	2,641	2,627	2,582	2,553	2,513	2,428	2,511	2,542
Mining	18	22	25	26	27	31	38	29	28	27	42	41	31	25	25
Construction	584	546	516	568	739	797	780	794	898	911	964	1,057	1,017	1,030	1,059
Transp., Comm., & Util.	899	874	903	959	1,009	896	943	984	1,015	1,079	1,085	1,088	1,137	1,182	1,262
Wholesale & Retail Trade	4,163	4,180	4,075	4,263	4,549	4,736	4,951	4,973	5,162	5,618	5,740	5,766	5,943	5,857	6,127
Wholesale Trade	1,115	1,041	952	991	1,091	1,119	1,129	1,075	1,074	1,145	1,114	1,178	1,249	1,216	1,218
Retail Trade	3,048	3,139	3,123	3,271	3,458	3,618	3,821	3,898	4,089	4,473	4,625	4,587	4,694	4,641	4,908
Fin., Ins., & Real Est.	739	762	723	745	731	738	782	624	659	868	885	918	809	834	862
Services	2,377	2,441	2,574	2,682	2,887	2,964	3,373	3,577	3,780	4,140	4,214	4,420	4,730	4,967	5,378
Government	2,260	2,319	2,416	2,509	2,593	2,751	2,840	2,898	2,957	3,290	3,275	3,533	3,651	3,722	3,919
- Federal	262	260	261	268	274	264	271	265	269	318	329	399	410	381	398
- State & Local	1,998	2,060	2,155	2,241	2,319	2,486	2,568	2,633	2,688	2,972	2,946	3,133	3,241	3,341	3,521
<b>Total Nonagricultural Employment</b>	13,021	13,158	13,446	14,242	15,332	15,834	16,385	16,521	17,126	18,515	18,757	19,335	19,745	20,128	21,174
<b>Population</b>	37,769	37,461	37,586	37,600	37,822	38,643	39,360	39,990	41,087	41,609	42,470	43,249	43,749	44,275	45,378
<b>Households</b>	13,749	13,678	13,785	13,811	13,934	14,275	14,639	14,969	15,481	15,691	15,998	16,326	16,531	16,763	16,670
Persons per Household	2.69	2.68	2.68	2.67	2.66	2.65	2.64	2.62	2.60	2.60	2.60	2.60	2.59	2.59	2.67
<b>Total Personal Income:</b>															
Current \$	445,218	464,542	499,780	546,689	580,698	606,373	632,259	686,958	722,429	769,948	822,214	857,686	912,610	940,312	1,010,465
1992 dollars ('92\$ x 1,000)	570,290	574,009	593,354	619,159	623,994	624,613	632,447	667,005	683,945	708,857	735,280	749,807	785,595	791,960	824,342
<b>Per Capita Personal Income:</b>															
Current (\$)	11,788	12,401	13,297	14,539	15,353	15,692	16,063	17,178	17,583	18,504	19,360	19,832	20,860	21,238	22,268
1992 dollars ('92\$)	15,100	15,323	15,787	16,467	16,498	16,164	16,068	16,679	16,646	17,036	17,313	17,337	17,957	17,887	18,166

### Bonneville County Simulated Differences without INEEL:

Employment:	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Manufacturing	(617)	(551)	(738)	(334)	(478)	(448)	(307)	(153)	284	464	659	795	800	577	407	202
Mining	(48)	(15)	(28)	(40)	(23)	(25)	(25)	(77)	(96)	(43)	(30)	(51)	(83)	(57)	(34)	(44)
Construction	(878)	(666)	(687)	(776)	(885)	(918)	(1,267)	(1,344)	(1,673)	(1,257)	(1,174)	(900)	(792)	(796)	(1,077)	(1,290)
Transp., Comm., & Util.	17	11	(35)	(83)	(115)	7	(78)	(197)	(223)	(285)	(169)	(202)	(131)	(96)	5	(31)
Wholesale & Retail Trade	(2,157)	(2,515)	(2,761)	(2,945)	(2,547)	(2,843)	(3,297)	(3,572)	(3,545)	(3,178)	(2,825)	(2,854)	(2,771)	(3,194)	(3,822)	(4,204)
Wholesale Trade						(658)	(862)	(1,179)	(1,138)	(1,013)	(973)	(1,046)	(1,041)	(1,123)	(1,283)	(1,299)
Retail Trade						(2,031)	(2,436)	(2,393)	(2,407)	(2,165)	(1,691)	(1,809)	(1,603)	(1,959)	(2,539)	(2,816)
Fin., Ins., & Real Est.	(159)	(194)	(177)	(189)	(283)	(351)	(687)	(404)	(397)	(342)	(204)	(571)	(652)	(589)	(643)	(695)
Services	(4,726)	(5,293)	(5,593)	(5,560)	(4,921)	(5,516)	(6,238)	(7,379)	(7,903)	(8,159)	(9,039)	(9,069)	(8,946)	(8,824)	(8,249)	(8,772)
Government	(1,118)	(804)	(1,040)	(1,044)	(856)	(1,008)	(1,127)	(1,100)	(1,402)	(1,361)	(1,356)	(1,393)	(1,399)	(1,368)	(1,342)	(1,396)
- Federal	(428)	(418)	(404)	(394)	(386)	(424)	(419)	(409)	(394)	(513)	(498)	(499)	(494)	(488)	(458)	(446)
- State & Local	(691)	(385)	(636)	(650)	(470)	(584)	(708)	(692)	(992)	(831)	(841)	(865)	(863)	(845)	(855)	(927)
<b>Total Nonagricultural Employment</b>	(9,686)	(10,026)	(11,059)	(10,972)	(10,108)	(11,101)	(13,027)	(14,227)	(14,956)	(14,161)	(14,138)	(14,246)	(13,976)	(14,347)	(14,755)	(16,231)
<b>Population</b>	(23,055)	(21,974)	(22,900)	(22,732)	(24,644)	(25,002)	(26,059)	(27,335)	(29,492)	(29,701)	(28,858)	(29,397)	(28,874)	(28,727)	(29,519)	(30,479)
<b>Households</b>	(5,124)	(5,129)	(5,421)	(5,418)	(6,095)	(6,268)	(6,704)	(7,168)	(8,010)	(8,174)	(7,944)	(8,200)	(7,869)	(7,785)	(8,170)	(8,639)
Persons per Household	(0.50)	(0.47)	(0.46)	(0.45)	(0.43)	(0.42)	(0.40)	(0.39)	(0.37)	(0.36)	(0.34)	(0.34)	(0.33)	(0.32)	(0.31)	(0.31)
<b>Total Personal Income:</b>																
Current \$ (\$ x 1,000)	(85,883)	(92,983)	(102,823)	(114,314)	(122,591)	(153,560)	(186,780)	(226,183)	(248,654)	(264,842)	(276,190)	(313,593)	(317,725)	(341,818)	(392,903)	(461,753)
1992 dollars ('92\$ x 1,000)	(310,572)	(322,408)	(345,230)	(361,481)	(349,065)	(400,617)	(460,810)	(523,956)	(535,172)	(512,350)	(470,548)	(484,228)	(462,264)	(481,840)	(531,014)	(602,697)
<b>Per Capita Personal Income:</b>																
Current (\$)	(7)	(154)	(98)	(32)	397	(167)	(430)	(882)	(566)	(466)	(281)	(538)	(489)	(669)	(970)	(1,654)
1992 dollars ('92\$)	(26)	(536)	(329)	(101)	1,131	(435)	(1,060)	(2,042)	(1,219)	(902)	(479)	(830)	(712)	(943)	(1,311)	(2,160)

### Bonneville County Simulated Percent Difference without INEEL:

Employment:	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Manufacturing	-28.3%	-25.2%	-31.6%	-15.5%	-20.0%	-20.3%	-14.3%	-7.2%	13.2%	21.3%	39.3%	58.4%	61.9%	38.6%	23.0%	10.6%
Mining	-82.0%	-42.6%	-72.7%	-93.5%	-60.2%	-61.5%	-55.9%	-86.0%	-88.4%	-81.3%	-65.3%	-70.2%	-77.7%	-67.0%	-57.0%	-67.6%
Construction	-62.2%	-50.3%	-52.5%	-52.1%	-54.2%	-54.3%	-59.4%	-59.8%	-64.6%	-56.3%	-56.7%	-49.8%	-51.3%	-58.6%	-64.3%	-68.0%
Transp., Comm., & Util.	2.0%	1.3%	-3.7%	-7.9%	-10.6%	0.8%	-7.6%	-17.0%	-18.0%	-22.5%	-14.6%	-17.1%	-12.8%	-9.5%	0.6%	-3.1%
Wholesale & Retail Trade	-43.5%	-46.3%	-46.5%	-46.5%	-40.5%	-43.2%	-46.3%	-48.1%	-46.8%	-43.1%	-40.5%	-40.3%	-40.1%	-44.6%	-49.1%	-51.1%
Wholesale Trade						-34.8%	-41.4%	-51.3%	-48.2%	-42.4%	-42.6%	-43.3%	-43.3%	-47.6%	-53.7%	-55.3%
Retail Trade						-44.7%	-48.4%	-46.7%	-46.2%	-43.4%	-37.4%	-38.8%	-36.6%	-41.8%	-47.1%	-48.6%
Fin., Ins., & Real Est.	-23.6%	-27.6%	-23.9%	-24.1%	-31.2%	-34.9%	-56.2%	-44.6%	-42.3%	-36.5%	-25.1%	-37.6%	-41.0%	-36.1%	-39.0%	-41.7%
Services	-77.8%	-80.8%	-82.9%	-81.1%	-77.2%	-78.8%	-78.9%	-81.2%	-80.7%	-80.7%	-82.3%	-80.7%	-81.1%	-81.1%	-78.9%	-79.1%
Government	-43.2%	-30.9%	-36.6%	-36.0%	-28.7%	-32.5%	-35.0%	-33.1%	-39.7%	-38.1%	-37.7%	-38.9%	-39.3%	-38.6%	-38.0%	-38.4%
- Federal	-65.0%	-64.8%	-63.8%	-62.7%	-61.3%	-65.0%	-62.8%	-62.1%	-60.6%	-66.5%	-64.7%	-65.4%	-65.7%	-65.7%	-64.1%	-63.0%
- State & Local	-35.7%	-19.7%	-28.8%	-28.6%	-20.0%	-23.8%	-27.8%	-26.0%	-34.7%	-29.9%	-30.0%	-31.0%	-31.2%	-30.6%	-30.6%	-31.9%
<b>Total Nonagricultural Employment</b>	-51.5%	-50.9%	-52.9%	-50.8%	-46.6%	-49.3%	-52.5%	-54.0%	-53.6%	-51.1%	-51.8%	-51.2%	-51.6%	-52.8%	-53.0%	-55.1%
<b>Population</b>	-43.9%	-41.7%	-41.9%	-41.3%	-42.8%	-42.4%	-43.2%	-43.7%	-45.5%	-45.3%	-43.6%	-43.8%	-43.2%	-42.7%	-43.4%	-44.4%
<b>Households</b>	-34.6%	-33.6%	-33.9%	-33.3%	-35.3%	-35.0%	-36.2%	-36.9%	-39.2%	-39.1%	-37.3%	-37.7%	-36.5%	-35.9%	-37.0%	-38.4%
Persons per Household	-14.3%	-13.7%	-13.5%	-13.4%	-13.0%	-12.8%	-12.3%	-12.2%	-11.7%	-11.5%	-11.0%	-11.0%	-10.9%	-10.5%	-10.4%	-10.3%
<b>Total Personal Income:</b>																
Current \$ (\$ x 1,000)	-44.0%	-43.9%	-43.2%	-41.7%	-38.7%	-44.0%	-46.9%	-50.7%	-49.5%	-48.3%	-45.3%	-46.8%	-45.9%	-46.2%	-47.9%	-51.4%
1992 dollars ('92\$ x 1,000)	-44.0%	-43.9%	-43.2%	-41.7%	-38.7%	-44.0%	-46.9%	-50.7%	-49.5%	-48.3%	-45.3%	-46.8%	-45.9%	-46.2%	-47.9%	-51.4%
<b>Per Capita Personal Income:</b>																
Current (\$)	-0.2%	-3.8%	-2.2%	-0.6%	7.2%	-2.8%	-6.5%	-12.3%	-7.3%	-5.6%	-3.1%	-5.4%	-4.7%	-6.1%	-8.1%	-12.7%
1992 dollars ('92\$)	-0.2%	-3.8%	-2.2%	-0.6%	7.2%	-2.8%	-6.5%	-12.3%	-7.3%	-5.6%	-3.1%	-5.4%	-4.7%	-6.1%	-8.1%	-12.7%

## Bonneville County Simulated Differences without INEEL

Employment:	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Manufacturing	323	381	555	835	1,010	936	649	522	448	920	808	628	403	333	276
Mining	(32)	2	(6)	(4)	25	29	36	27	26	25	40	39	22	18	18
Construction	(1,560)	(1,388)	(1,229)	(1,537)	(1,796)	(1,633)	(1,484)	(1,613)	(1,614)	(1,561)	(1,475)	(1,502)	(1,636)	(1,773)	(1,566)
Transp., Comm., & Util.	(33)	(20)	(23)	75	100	(39)	(27)	(43)	(91)	(188)	(336)	(442)	(411)	(493)	(408)
Wholesale & Retail Trade	(3,985)	(4,247)	(4,781)	(4,864)	(5,194)	(5,301)	(5,301)	(5,513)	(5,646)	(5,605)	(5,691)	(6,332)	(6,282)	(6,802)	(6,699)
Wholesale Trade	(1,131)	(1,336)	(1,530)	(1,547)	(1,371)	(1,771)	(1,772)	(1,966)	(2,114)	(2,185)	(2,555)	(2,730)	(2,674)	(2,796)	(2,857)
Retail Trade	(2,760)	(2,910)	(3,189)	(3,268)	(3,350)	(3,423)	(3,453)	(3,487)	(3,600)	(3,420)	(3,136)	(3,603)	(3,608)	(4,006)	(3,841)
Fin., Ins., & Real Est.	(541)	(528)	687	(607)	(694)	(664)	(597)	(773)	(788)	(558)	(547)	(576)	(616)	(640)	(597)
Services	(8,715)	(8,799)	(8,852)	(9,728)	(10,376)	(11,062)	(10,931)	(11,343)	(11,303)	(12,160)	(12,591)	(12,820)	(12,618)	(12,825)	(12,832)
Government	(1,431)	(1,485)	(1,569)	(1,477)	(1,606)	(1,871)	(1,881)	(1,956)	(2,004)	(1,899)	(2,090)	(1,703)	(1,694)	(1,832)	(1,615)
- Federal	(451)	(442)	(440)	(452)	(489)	(547)	(647)	(625)	(602)	(512)	(435)	(333)	(317)	(357)	(340)
- State & Local	(961)	(996)	(1,052)	(1,025)	(1,117)	(1,325)	(1,235)	(1,331)	(1,402)	(1,388)	(1,655)	(1,370)	(1,377)	(1,475)	(1,274)
<b>Total Nonagricultural Employment</b>	(15,974)	(16,083)	(16,593)	(17,306)	(18,120)	(19,499)	(19,536)	(20,692)	(20,971)	(21,006)	(21,882)	(22,708)	(22,832)	(24,014)	(23,422)
<b>Population</b>	(31,577)	(32,973)	(33,223)	(33,695)	(34,781)	(36,368)	(37,744)	(38,261)	(38,031)	(37,820)	(36,892)	(36,772)	(36,950)	(37,261)	(36,442)
<b>Households</b>	(9,105)	(9,703)	(9,963)	(10,222)	(10,352)	(10,966)	(11,437)	(12,007)	(11,834)	(11,841)	(11,612)	(11,671)	(12,099)	(12,502)	(11,444)
Persons per Household	(0.30)	(0.30)	(0.29)	(0.29)	(0.28)	(0.26)	(0.25)	(0.24)	(0.23)	(0.26)	(0.25)	(0.24)	(0.20)	(0.17)	(0.22)
<b>Total Personal Income:</b>															
Current \$ (\$ x 1,000)	(487,876)	(519,592)	(548,784)	(598,814)	(670,672)	(714,877)	(781,369)	(793,123)	(809,216)	(793,871)	(781,428)	(795,941)	(818,838)	(978,737)	(1,025,505)
1992 dollars ('92\$ x 1,000)	(624,933)	(642,030)	(651,534)	(678,195)	(720,676)	(736,381)	(781,601)	(770,086)	(766,109)	(730,882)	(698,805)	(695,829)	(704,873)	(824,323)	(836,612)
<b>Per Capita Personal Income:</b>															
Current (\$)	(1,668)	(1,572)	(1,511)	(1,528)	(1,882)	(1,923)	(2,271)	(1,736)	(1,776)	(1,184)	(847)	(833)	(596)	(2,298)	(2,616)
1992 dollars ('92\$)	(2,136)	(1,942)	(1,794)	(1,730)	(2,023)	(1,980)	(2,271)	(1,686)	(1,681)	(1,090)	(757)	(729)	(513)	(1,936)	(2,134)

## Bonneville County Simulated Percent Difference without INEEL

Employment:	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Manufacturing	19.5%	23.4%	33.4%	50.4%	56.5%	47.2%	32.0%	24.6%	20.6%	55.3%	46.3%	33.3%	19.9%	15.3%	12.2%
Mining	-64.1%	7.5%	-19.5%	-12.0%	1189.9%	1373.8%	1794.3%	1370.1%	1294.9%	1271.1%	1939.0%	1814.4%	216.4%	251.6%	257.5%
Construction	-72.7%	-71.8%	-70.4%	-73.0%	-70.8%	-67.2%	-65.6%	-67.0%	-64.3%	-63.1%	-60.5%	-58.7%	-61.7%	-63.3%	-59.7%
Transp., Comm., & Util.	-3.6%	-2.2%	-2.5%	8.4%	11.0%	-4.2%	-2.8%	-4.2%	-8.2%	-13.5%	-23.6%	-28.9%	-26.5%	-29.4%	-24.4%
Wholesale & Retail Trade	-48.9%	-50.4%	-54.0%	-53.3%	-51.3%	-52.3%	-51.7%	-52.6%	-52.2%	-49.9%	-49.8%	-52.3%	-51.4%	-53.7%	-52.2%
Wholesale Trade	-50.4%	-56.2%	-61.6%	-60.9%	-55.7%	-61.3%	-61.1%	-64.6%	-66.3%	-65.6%	-69.6%	-69.8%	-68.2%	-69.7%	-70.1%
Retail Trade	-47.5%	-48.1%	-50.5%	-50.0%	-49.2%	-48.6%	-47.5%	-47.2%	-46.8%	-43.3%	-40.4%	-44.0%	-43.5%	-46.3%	-43.9%
Fin., Ins., & Real Est.	-42.3%	-40.9%	-48.7%	-44.9%	-48.7%	-47.4%	-43.3%	-55.3%	-54.5%	-39.1%	-38.2%	-38.5%	-43.2%	-43.4%	-40.9%
Services	-78.6%	-78.3%	-77.5%	-78.4%	-78.2%	-78.9%	-76.4%	-76.0%	-74.9%	-74.6%	-74.9%	-74.4%	-72.7%	-72.1%	-70.5%
Government	-38.8%	-39.0%	-39.4%	-37.1%	-38.2%	-40.5%	-39.8%	-40.3%	-40.4%	-36.6%	-39.0%	-32.5%	-31.7%	-33.0%	-29.2%
- Federal	-63.3%	-63.0%	-62.7%	-62.8%	-64.1%	-67.4%	-70.4%	-70.2%	-69.2%	-61.7%	-56.9%	-45.4%	-43.6%	-48.4%	-46.1%
- State & Local	-32.5%	-32.6%	-32.8%	-31.4%	-32.5%	-34.8%	-32.5%	-33.6%	-34.3%	-31.8%	-36.0%	-30.4%	-29.8%	-30.6%	-26.6%
<b>Total Nonagricultural Employment</b>	-55.1%	-55.0%	-55.2%	-54.9%	-54.2%	-55.2%	-54.4%	-55.6%	-55.0%	-53.2%	-53.8%	-54.0%	-53.6%	-54.4%	-52.5%
<b>Population</b>	-45.5%	-46.8%	-46.9%	-47.3%	-47.9%	-48.5%	-49.0%	-48.9%	-48.1%	-47.6%	-46.5%	-46.0%	-45.8%	-45.7%	-44.5%
<b>Households</b>	-39.8%	-41.5%	-42.0%	-42.5%	-42.6%	-43.4%	-43.9%	-44.5%	-43.3%	-43.0%	-42.1%	-41.7%	-42.3%	-42.7%	-40.7%
Persons per Household	-10.1%	-10.0%	-9.8%	-9.7%	-9.5%	-8.9%	-8.7%	-8.4%	-8.1%	-9.1%	-8.7%	-8.4%	-7.2%	-6.3%	-7.5%
<b>Total Personal Income:</b>															
Current \$ (\$ x 1,000)	-52.3%	-52.8%	-52.3%	-52.3%	-53.6%	-54.1%	-55.3%	-53.6%	-52.8%	-50.8%	-48.7%	-48.1%	-47.3%	-51.0%	-50.4%
1992 dollars ('92\$ x 1,000)	-52.3%	-52.8%	-52.3%	-52.3%	-53.6%	-54.1%	-55.3%	-53.6%	-52.8%	-50.8%	-48.7%	-48.1%	-47.3%	-51.0%	-50.4%
<b>Per Capita Personal Income:</b>															
Current (\$)	-12.4%	-11.2%	-10.2%	-9.5%	-10.9%	-10.9%	-12.4%	-9.2%	-9.2%	-6.0%	-4.2%	-4.0%	-2.8%	-9.8%	-10.5%
1992 dollars ('92\$)	-12.4%	-11.2%	-10.2%	-9.5%	-10.9%	-10.9%	-12.4%	-9.2%	-9.2%	-6.0%	-4.2%	-4.0%	-2.8%	-9.8%	-10.5%

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## INEEL IMPACTS



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